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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER TAW-013US
INTERNATIONAL APPLICATION NO. PCT/JP2004/014610		U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/576241
INTERNATIONAL FILING DATE 4 October 2004		PRIORITY DATE CLAIMED 15 October 2003
TITLE OF INVENTION POLYMER ACTUATOR		
APPLICANT(S) FOR DO/EO/US Tatsuya HATTORI <i>et al.</i>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.		
2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.		
3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.		
4. <input type="checkbox"/> The US has been elected (Article 31).		
5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2))		
a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).		
b. <input type="checkbox"/> has been communicated by the International Bureau.		
c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).		
6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).		
a. <input type="checkbox"/> is attached hereto.		
b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).		
7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))		
a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).		
b. <input type="checkbox"/> have been communicated by the International Bureau.		
c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.		
d. <input type="checkbox"/> have not been made and will not be made.		
8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).		
9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).		
10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.		
12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.		
13. <input type="checkbox"/> A preliminary amendment.		
14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.		
15. <input type="checkbox"/> A substitute specification.		
16. <input type="checkbox"/> A power of attorney and/or change of address letter.		
17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.		
18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).		
19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).		

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/576241		INTERNATIONAL APPLICATION NO. PCT/JP2004/014610		ATTORNEY'S DOCKET NUMBER TAW-013US	
20. <input checked="" type="checkbox"/> Other items or information:		Response to Notification of Corrected Papers under 35 U.S.C. 371 in the DO/EO/US Submission of Drawings 8 sheets of Formal Drawings (Figs. 1-12) Copy of 371 Formalities Letter Return Receipt Postcard			
The following fees have been submitted				CALCULATIONS	PTO USE ONLY
21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a))		\$300		\$	
22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)		\$0		\$	
All other situations		\$200			
23. <input type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)		\$0		\$	
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority		\$100			
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB		\$400			
All other situations		\$500			
TOTAL OF 21, 22 and 23 =				\$ 0.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250.00	\$	
Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	- 20 =		x		
Independent claims	- 3 =		x		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+		
TOTAL OF ABOVE CALCULATIONS =				\$ 0.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
SUBTOTAL =				\$ 0.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
TOTAL NATIONAL FEE =				\$ 0.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
				\$	
TOTAL FEES ENCLOSED =				\$ 0.00	
				Amount to be refunded:	\$
				Amount to be charged	\$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ 0.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038

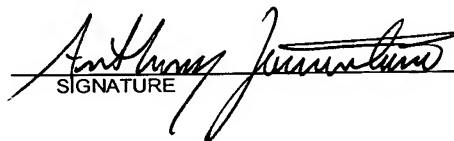
**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed an granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Anthony A. Laurentano  
LAHIVE & COCKFIELD, LLP  
One Post Office Square  
Boston, Massachusetts 02109-2127  
(617) 227-7400

December 28, 2006

CUSTOMER NUMBER: 00959

  
SIGNATURE

Anthony A. Laurentano  
NAME

38,220  
REGISTRATION NUMBER

Docket No.: TAW-013US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Tatsuya Hattori *et al.*

Application No.: 10/576,241

Confirmation No.: 8875

Filing Date of  
International Application: 4 October 2004

Art Unit: N/A

For: POLYMER ACTUATOR

Examiner: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF CORRECTED PAPERS UNDER 35 U.S.C. 371 IN  
THE UNITED STATES DESIGNATED/ELECTED OFFICE**

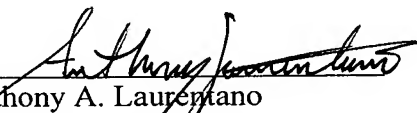
MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Corrected Papers Under 35 U.S.C. 371, mailed December 7, 2006, Applicants respectfully submit 8 sheets of Formal Drawings (Figs. 1-12), as well as a copy of the 371 Formalities Letter.

Dated: December 28, 2006

Respectfully submitted,

By   
Anthony A. Laurentano  
Registration No.: 38,220  
LAHIVE & COCKFIELD, LLP  
One Post Office Square  
Boston, Massachusetts 02109-2127  
(617) 227-7400  
(617) 742-4214 (Fax)  
Attorney/Agent For Applicants

Docket No.: TAW-013US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Tatsuya Hattori *et al.*

Application No.: 10/576,241

Confirmation Number: 8875

Filing Date of  
International Application: 4 October 2004

Art Unit: N/A

For: POLYMER ACTUATOR

Examiner: Not Yet Assigned

**SUBMISSION OF DRAWINGS**

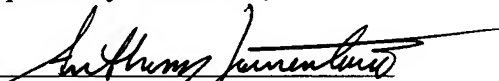
MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Submitted herewith is one set (8 sheets, twelve figures) of drawings for filing in the above-identified patent application. Kindly substitute the enclosed drawings for the drawings submitted with the originally filed application.

Dated: December 28, 2006

Respectfully submitted,

By 

Anthony A. Laurentano  
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(617) 227-7400  
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Attorney/Agent For Applicants



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/576,241	Tatsuya Hattori	TAW-013US

INTERNATIONAL APPLICATION NO.
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PCT/JP04/14610

I.A. FILING DATE	PRIORITY DATE
10/04/2004	10/15/2003

00959

LAHIVE & COCKFIELD, LLP  
 ONE POST OFFICE SQUARE  
 BOSTON, MA 02109-2127

**DOCKETED**

*Feb. 7, 2007 - Correct Apph. Papers*  
*Jul. 7, 2007 - End of Stat.*

CONFIRMATION NO. 8875

371 FORMALITIES LETTER



\*OC000000021505193\*

Date Mailed: 12/07/2006

### NOTIFICATION OF CORRECTED PAPERS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 04/13/2006
- English Translation of the IA filed on 04/13/2006
- Copy of the International Search Report filed on 04/13/2006
- Copy of IPE Report filed on 04/13/2006
- Preliminary Amendments filed on 04/13/2006
- Information Disclosure Statements filed on 04/13/2006
- Oath or Declaration filed on 04/13/2006
- U.S. Basic National Fees filed on 04/13/2006
- Assignment filed on 04/13/2006
- Priority Documents filed on 04/13/2006

- Substitute drawings in compliance with 37 CFR 1.84 because:

- drawing figures contain text that is not in English (including, for example, a flow chart that was originally not in English that has been marked up to include the English text) see 37 CFR 1.84(p)(2) and 37 CFR 1.52(d)(1);

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.

<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebs>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

CHARITTA A BURT

Telephone: (703) 308-9140 EXT 207

PART 1 - ATTORNEY/APPLICANT COPY

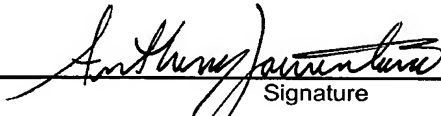
U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/576,241	PCT/JP04/14610	TAW-013US

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 956 465 764 US in an envelope addressed to:

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on December 28, 2006  
Date



Signature

Anthony A. Laurentano

Typed or printed name of person signing Certificate

38,220

Registration Number, if applicable

(617) 227-7400

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal Letter to the United States Designated-Elected Office (3 pages)

Response to Notification of Corrected Papers under 35 U.S.C. 371 (1 page)

Submission of Drawings (1 page)

7 sheets Formal Drawings (Figs. 1-12)

Copy of 371 Formalities Letter (2 pages)

Certificate of Express Mailing (1 page)

Return Receipt Postcard